ABSTRACT OF THE DISCLOSURE

A power conversion apparatus for converting power from an alternating source to dc includes an input stage for receiving power from the alternating source, which includes an input filter, a rectifier for rectifying the alternating signal, a capacitor for storing energy from the rectified signal, and an output for outputting power from the rectifying means and the capacitor to the pulsed load. The pulsed load has at least one switched winding which receives power from the output, and wherein the capacitor is configured such that the voltage across the capacitor falls below 15% of the nominal peak rectified voltage of the source during each cycle of the alternating source. A converter of this kind provides benefits in that the current drawn from the ac supply falls within limits imposed by regulations and is simpler and cheaper than known converters of a similar power rating.